

**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/IL04/00046

**Box IV TEXT OF THE ABSTRACT (Continuation of Item 5 of the first sheet)****NEW ABSTRACT**

The present invention is of system, device, and method for detection, localization, and characterization of plaque-induced stenosis of a blood vessel. More particularly, the present invention relates to a balloon catheter (101) having an expandable balloon (100) insertable into a blood vessel, which balloon comprises a plurality of pressure sensor (110, 120, 130, 140) operable to detect stenosis of the vessel, and further operable to report degrees of compressibility of stenotic regions of plaque within the vessel, thereby distinguishing between standard and vulnerable plaque.

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**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(7) : A61B 5/02  
US CL : 600/486, 485, 585

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
U.S. : 600/486, 485, 585, 481, 488, 561, 585, 424, 431, 437; 604/96.01, 97.01, 98.01, 104

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
EAST

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,178,153 A (EINZIG) 12 January 1993 (12.01.1993), column 18, line 55 to column 24, line 13.	1, 2, 4-6
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Y		3, 7-12
Y	US 3,831,588 A (RINDNER) 27 August 1974 (27.08.1974), column 2, lines 16-20.	3
Y	US 4,211,233 A (LIN) 08 July 1980 (08.07.1980), column 3, lines 47-50.	7
Y	US 5,259,837 A (VAN WORMER) 09 November 1993 (09.11.1993), column 3, line 53 to column 4, line 19.	8-12
A	US 5,865,801 A (HOUSER) 02 February 1999 (02.02.1999), column 5, line 54 to column 6, line 40.	13

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier application or patent published on or after the international filing date	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&"	document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means		
"P" document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search

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